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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,001	07/29/2003	Winfried Teiwes	SMIN-00100	8546
7590 David R. Stevens Stevens Law Group P.O. Box 1667 San Jose, CA 95109			EXAMINER STREGE, JOHN B	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 07/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/630,001

Applicant(s)

TEIWES ET AL.

Examiner

John B. Strege

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 18-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. The amendment received 6/27/07 has been entered in full.

***Restriction***

2. Applicant's election with traverse of the restriction in the reply filed on 6/27/07 is acknowledged. The traversal is on the grounds that groups IV and V were cancelled and that groups II and III are now dependent on the elected group I. The Examiner finds this convincing and therefore the previous restriction is withdrawn and claims 1-13 and 18-19 are herein examined.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1-11, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sklar et al. USPN 5,098,426 (hereinafter "Sklar").

Regarding claim 1, Sklar discloses a system for determining the orientation of the eye (col. 3 lines 15-23) consisting of the following sub-systems: an x, y high-speed eye tracking system, for measuring the very fast translation or saccadic motion of the eye, relative to an ophthalmic surgical, diagnostic or treatment device or instrument (53a of figure 3, col. 15 lines 52-55); a second position measurement system for measuring slower eye movements, such as multiple dimensions of eye position and/or position of

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eye parts, relative to an ophthalmic surgical, diagnostic or treatment device or instrument (53b of figure 3, col. 15 lines 49-52); and a system for combining the measurements of the two previous systems for obtaining a multiple dimensional model of the eye position that is more accurate than the model obtainable from either system individually (53 of figure 3, col. 15 lines 36-55).

Regarding claims 2-3, the device of Sklar is a single high speed imaging device (col. 15 lines 36-55).

Regarding claim 4, Sklar discloses obtaining 3 dimensions of eye position (col. 8 lines 17-35).

Regarding claim 5, Sklar discloses that the tracking camera substantially excludes specularly reflecting light by cross polarization (paragraph bridging cols. 9-10) which reads on a structured illumination and according filtering means to improve visibility of a unique combination of trackable features.

Claim 6 is similarly analyzed to claim 1.

Claim 7 is similarly analyzed to claim 2.

Regarding claim 8, Sklar discloses obtaining 3 dimensions of eye position thus discloses measuring depth (col. 8 lines 17-35).

Claim 9 is similarly analyzed to claim 5.

Regarding claim 10, Sklar discloses a means for making a reference measurement of three or more points on the eye, in three dimensions; a means for measuring these same reference points at a subsequent time in three dimensions; and

a means for determining the position of the eye from the change in position at these multiple points (col. 10 lines 25-52).

Claim 11 is similarly analyzed to claim 10.

Regarding claims 18-19, Sklar discloses that the invention is used for laser refractive surgery (see at least the abstract).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Yamada et al. USPN 5,311,879 (hereinafter "Yamada").

Regarding claim 12, as discussed above Sklar discloses all of the limitations of claim 1 including a means for tracking the translational eye position. Sklar does not explicitly disclose a means for tracking the translational head position and a means for determining the rotation of the eye from the variation of the difference between head position and eye position. Sklar also recites that his system can be used for medical diagnosis (col. 12 lines 3-10).

Yamada discloses a means for tracking translational eye position, a means for tracking the translational head position; and a means for determining the rotation of the eye from the variation of difference between the head and eye position (col. 3 lines 19-41). This allows for a medical diagnosis of the individual.

Sklar and Yamada are analogous art because they are from the same field of endeavor of medical diagnosis.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine Sklar and Yamada to use the information of the head to determine information about eye movement. The motivation for doing so would be that it is valuable in certain types of medical diagnosis. Thus it would have been obvious to one of ordinary skill in the art to combine Sklar and Yamada to obtain the invention of claim 12.

Claim 13 is similarly analyzed to claim 12.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yee et al. USPN 6,322,216 Two Camera Off-Axis Eye Tracker for Laser Eye Surgery.

### ***Contact Information***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Strege whose telephone number is (571) 272-7457. The examiner can normally be reached on Monday-Friday between the hours of 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

  
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